

(12) UK Patent Application (19) GB (11) 2 302 828 (13) A

(43) Date of A Publication 05.02.1997

(21) Application No 9513746.9

(22) Date of Filing 06.07.1995

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(51) INT CL⁶

C09J 7/02, B32B 3/16

(52) UK CL (Edition O)

B2E EM E1739 E553T E600T

(56) Documents Cited

GB 2235883 A GB 2198369 A GB 1422384 A

US 5213565 A

Abstract of DE 2909276 A (H.B. Cohausz)

(58) Field of Search

UK CL (Edition O) B2E EM

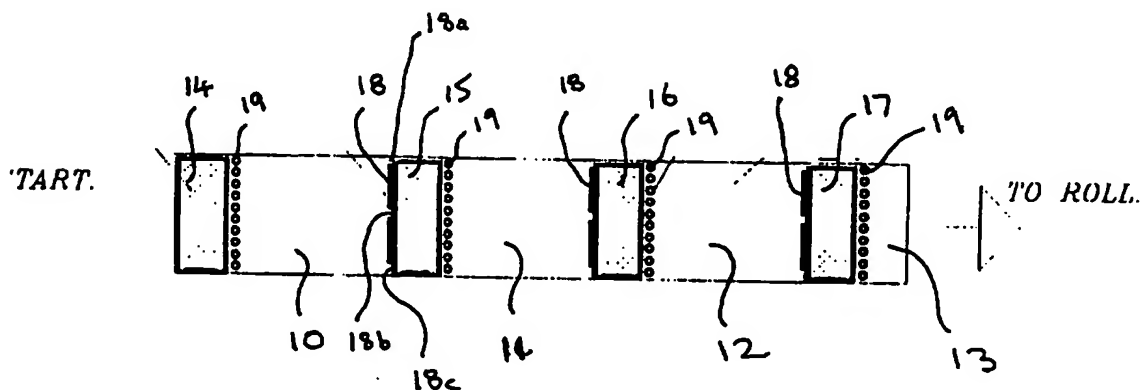
INT CL⁶ B32B 3/16, C09J 7/02

Online: EDOC, JAPIO, WPI

(54) Adhesive tape

(57) A roll of adhesive tape which when pulled off by holding piece (14) will tear at (18) leaving the user with a piece of adhesive tape piece (10) with an small unadhesive section attached. This unadhesive section is removed by applying the adhesive piece of tape into place, then tearing at (19) where there is a weaker line of resistance than the adhesion of the tape. The roll of tape will then have a non adhesive tab (14) ready for the next application.

FIG 1



GB 2 302 828

FIG. 1

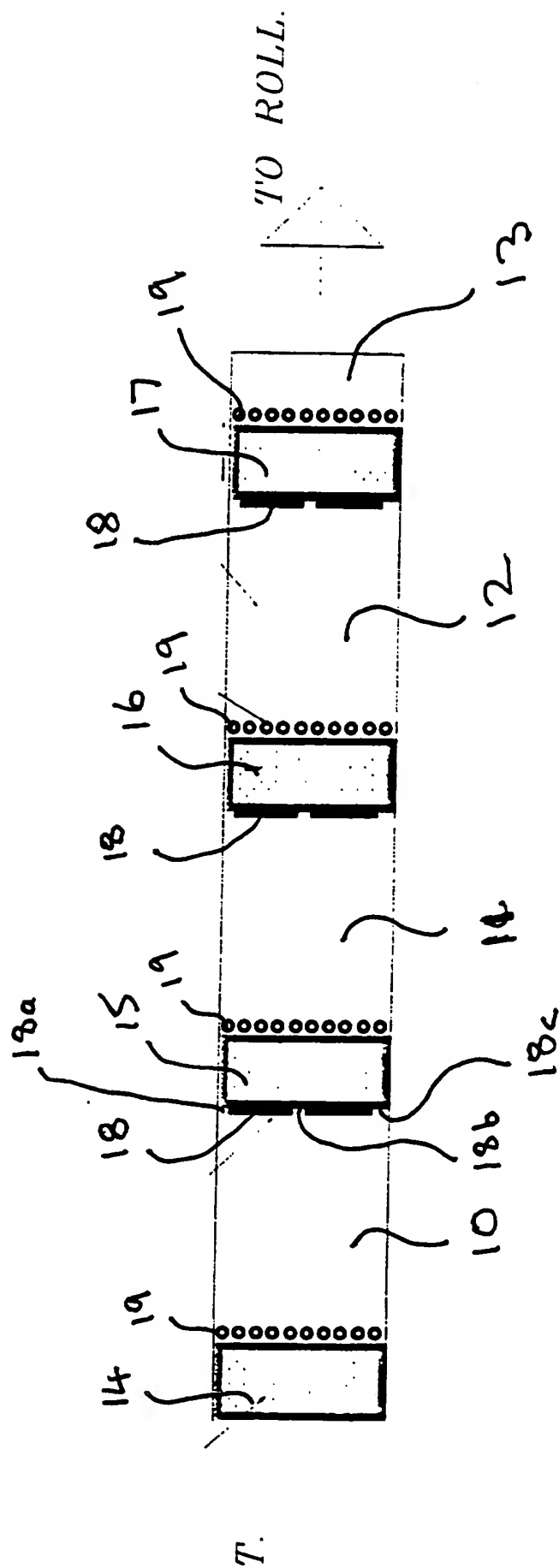
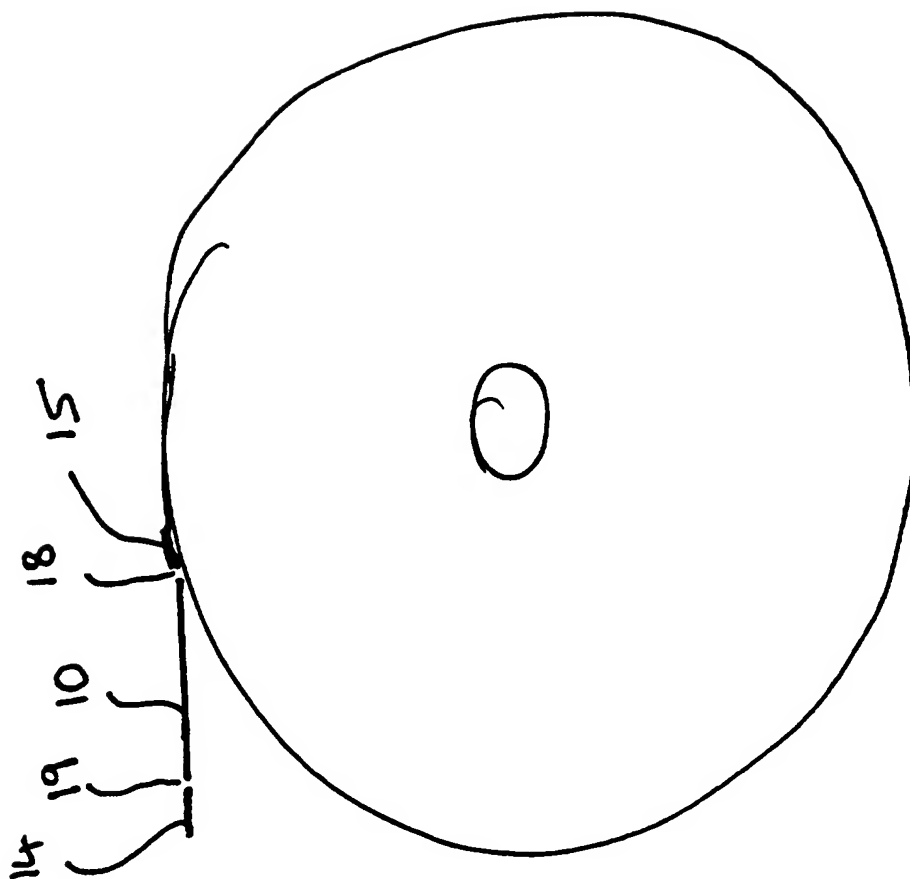


FIG 2



ADHESIVE TAPE

This invention relates to adhesive tape.

5 Adhesive tape has been known for many years and is usually provided
in a roll. However, there is a continual problem as to how conveniently to
dispense lengths of tape. Usually an indiscriminate length is peeled off and
then severed. If a tool, for example a pair of scissors is used, then the tape
is usually cut fairly cleanly and precisely but the tape can stick to the scissors
10 and there are problems in manipulating the roll, lengths to be removed, and
the scissors, with a single pair of hands. If the tape is torn off manually, then
a ragged, unsightly end of the tape usually results and sometimes the tape will
not tear at all, resulting in a crumpled, wasted length of tape. Furthermore,
since it is undesirable to remove a length of tape which is smaller than that
15 required, and it is rarely possible to guess exactly, the person using the tape
usually removes a longer length than is necessary, resulting in further
wastage.

 A further problem is that once a length of tape has been removed, the
20 remaining end of the tape often becomes stuck securely down on the roll
resulting in difficulty in removing a subsequent length.

 Special tape dispensers are available, but these are often heavy or
expensive and take up more room.

25

 My invention solves the problem of providing predetermined lengths
of adhesive tape, quickly and efficiently, without the need for tools or
dispensers.

The invention provides a length of adhesive tape divided into sections of predetermined length by a set of transverse first lines of weakness provided at intervals spaced apart along the length of the tape.

5 Preferably a pull tag is provided in each section to facilitate removal of the section from the remainder of the tape by pulling on the tag until the associated section breaks away from the remainder of the tape and the associated first line of weakness.

10 There may be a set of transverse second lines of weakness, each second line of weakness being adjacent to a tag, so that when a section of tape and associated tag has been removed from the remainder of the tape, by pulling on the tag, the tag can then readily be removed and discarded by tearing along the associated second line of weakness. Preferably the first lines of weakness
15 are weaker than the second lines of weakness.

 Preferably the tape is coiled into a roll such that sections of predetermined length can be successively peeled from the roll by pulling on each pull tag as it is exposed for use.

20

 There may be more than one tape, the sections of one tape being different in length to the sections of another tape.

 Alternatively, one tape may have sections of differing predetermined
25 lengths.

 By way of example, a specific embodiment of the tape will now be described, with reference to the accompanying drawings, in which :-

Figure 1 is a plan view of a length of an embodiment of adhesive tape according to the invention; and

5 Figure 2 is a side view of a much longer length of the tape formed into a roll.

10 The length of tape shown in Figure 1 comprises three sections 10, 11 and 12, of identical predetermined length. The start of a fourth section 13 is visible in the figure. The sections are respectively associated with pull tags 14, 15, 16 and 17.

15 Each section is separated from the next section by a first line of weakness 18. This line of weakness is provided by a pair of adjacent slits so that the tape is only held together at three points, 18a, 18b, and 18c. If a longer length of tape is formed into a roll, such as is shown in Figure 2, and manual pulling pressure is applied to the tag 14, which is non-adhesive, for example being coated with a silicon release composition, then the section 10 can be unpeeled from the roll as shown in Figure 2.

20 If further pressure is applied to the tag 14 at the point in time shown in Figure 2, then because the tape is very weak at the point 18, the tape severs at the point 18 so that the section 10, together with the associated tag 14, becomes separated from the roll.

25 This section of tape can now be used for whatever adhesive purpose the user has in mind.

If it is not convenient to retain the tag 14, then this can now be separated from the section 10 by tearing along a second line of weakness 19.

5 This second line of weakness is provided by piercing a series of holes across the tape.

The lines of weakness 19 are stronger than the lines of weakness 18 so that when the tags are pulled, to remove sections from the roll, separation occurs at the lines 18 and not at the lines 19.

10

The adhesive tape may be manufactured with sections such as 10, 11 and 12, of any desired length. One tape may be provided with sections of one predetermined length while another tape is provided with sections of a second predetermined length. Alternatively, a single row of tape may have sections
15 of different predetermined lengths.

The reader's attention is directed to all papers and documents which are filed concurrently with or previous to this specification in connection with this application and which are open to public inspection with this specification, and
20 the contents of all such papers and documents are incorporated herein by reference.

All of the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps of any
25 method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

Each feature disclosed in this specification (including any accompanying claims, abstract and drawings), may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature
5 disclosed is one example only of a generic series of equivalent or similar features.

The invention is not restricted to the details of the foregoing embodiment(s). The invention extends to any novel one, or any novel
10 combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

CLAIMS.

1. A piece of adhesive tape which is dispensable without the use of cutting mechanism.
2. A piece of adhesive tape as claimed in Claim 1 with unadhesive lengths between the adhesive lengths .
3. A piece of adhesive tape as claimed in claim 1 or Claim 2 with tearing points running along the meeting point of the adhesive and non adhesive sections.
4. A piece of adhesive tape as claimed in claim 1 or Claim 2 or Claim 3 with differing strengths of resistance at the tearing points to ensure the tape tears before the non adhesive section first as it comes of a roll. Leaving an unadhesive length standing of the roll.
5. A piece of tape substantially as described herein with reference to Figures 1-2 of the accompanying drawings.



Application No: GB 9513746.9
Claims searched: 1-5

Examiner: Diane Davies
Date of search: 16 July 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): B2E: EM

Int Cl (Ed.6): B32B 3/16; C09J 7/02

Other: Online: EDOC, JAPIO, WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2235883 A (Seal King Ind. Co. Ltd.) Whole document: adhesive tape has spaced transverse lines of weakness and areas without adhesive.	1-3
X	GB 2198369 A (Printing & Paper Co.) Whole document: adhesive tape has uncoated bands between adhesive sections and tear lines at the leading and trailing edges of the uncoated bands.	1-5
X	GB 1422364 A (L. Shu-lien) Whole document: adhesive tape with non-adhesive portions and tear lines.	1-3
X	US 5213565 A (E.J. Rollband) Whole document: separable adhesive tape segments on a roll with non-adhesive end sections.	1-3
X	Abstract of DE 2909276 A (H.B. Cohausz) Adhesive tape with adhesive free zones and perforations.	1-3

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.

& Member of the same patent family

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.